

IN THE SPECIFICATION:

Please replace paragraph [0028] with the following amended paragraph:

[0028] In contrast to the prior art use of a Cl₂ main etchant; an aspect of the present invention is use of HCl as a main etchant. HCl plasma comprises hydrogen and chlorine ions and radicals, which dissociation is different from that of Cl₂. While not wishing to be bound by theory, it is believed that hydrogen is a reduction agent that helps convert unused or excess chlorine, as well as chloride by-products, to HCl gas. This results in less corrosive by-products disposed on one or more surfaces of etched MTJ stacks, as compared with Cl₂ plasma, as HCl gas may be pumped out of a chamber. Moreover, MTJ stack to resist mask selectivity with HCl plasma is better than that of Cl₂ plasma, so a single-mask layer of photoresist is more feasible for etching an entire MTJ stack 120. HCl may be used with additive gases such as CO, N₂, or Ar to enhance MTJ stack to mask selectivity when mask material such as silicon oxide and the like is used. Notably, another hydrogen halide, such as HBr, may be used as an etchant gas in addition to HCl.